

Judge Cudahy and the Deference Tension in United States Energy Law

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Among the judges on the U.S. courts of appeals, Judge Richard Cudahy stands out for his experience in and writings on energy law. In this Essay, we argue that Judge Cudahy's energy opinions elaborate on two recurring themes in U.S. energy law: judicial humility and deference for subnational innovation. At the same time, these themes present a deference tension: where federal regulators disapprove of state regulatory policies, courts may confront a conflict between deferring to federal regulators and encouraging subnational energy policy innovations. We argue that in such cases, Judge Cudahy's decisions point towards a principle of favoring the outcome that best supports the system-wide welfare of the electric grid. This principle has important implications for contemporary energy issues in the United States, especially for renewable and clean energy policy.

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Introduction

Among the judges on the U.S. courts of appeals, Judge Richard Cudahy ranks among the most experienced in matters of energy regulation and among the most prolific on legal matters of interest to the energy industry. A native

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Wisconsinite, Judge Cudahy attended West Point and served in the United States Army Air Corps before joining the Yale Law School class of 1955.¹ After many years of private practice and teaching,² he served as the Chairman of the Wisconsin Public Service Commission from 1972-75. Among other milestones, his chairmanship produced the *Madison Gas* decision,³ a case with mundane origins that ultimately came to represent the advent of the intentional design of electricity pricing to encourage moderation in consumption. Judge Cudahy has written numerous articles and given many talks on energy industry developments over a career spanning many decades.

Judge Cudahy's career has witnessed sweeping changes in the industry and its regulation. Beginning with the energy shocks of the late 1970s, policymakers embarked on a relentless march away from vertically integrated, monopolistic natural gas and electric utilities and toward competitive energy markets. Judge Cudahy's opinions have addressed numerous issues of significance for energy law along this path, including the deregulation of interstate natural-gas transportation,⁴ the wholesale abandonment of nuclear power plant construction on the heels of the 1979 Three-Mile Island disaster,⁵ and in a recent and important decision discussed below, the efforts by the Federal Energy Regulatory Commission (FERC) to modernize the electrical grid.⁶

Judge Cudahy's sincere pleasure in crafting energy law decisions is readily apparent to anyone who tracks his opinions. One example is his majority opinion in *City of Kaukauna v. FERC*,⁷ which interpreted the terms of a series of nineteenth-century conveyances of property along Wisconsin's Fox River. The case presented the opportunity for a discourse on the history of Judge Cudahy's native state, from its European discovery by Jean Nicolet in 1634, through the troubled nineteenth-century efforts to build canals connecting the state's waterways and the give-and-take conveyances surrounding its entry into the Union in 1848. The opinion also features a discussion of the basic mechanics of hydropower, as a predicate to resolving the question of whether

1. See *History of the Federal Judiciary—Cudahy*, Richard Dickson, FED. JUDICIAL CTR., <http://www.fjc.gov/servlet/nGetInfo?jid=540&cid=999&ctype=na&instat=na> (last visited Apr. 8, 2012).

2. Judge Cudahy practiced energy law at Isham, Lincoln & Beale, and taught energy law at George Washington University and Marquette University. See *id.*

3. *Madison Gas & Elec. Co.*, Docket No. 2-U-7423, 5 P.U.R. 4th 28 (Wisc. Pub. Serv. Comm'n Aug. 8, 1974).

4. See *Illinois ex rel. Hartigan v. Panhandle E. Pipeline Co.*, 852 F.2d 891 (7th Cir. 1988) (en banc) (Cudahy, J., concurring).

5. *In re Wabash Valley Power Ass'n*, 72 F.3d 1305 (7th Cir. 1995).

6. *Ill. Commerce Comm'n v. FERC*, 576 F.3d 470 (7th Cir. 2009) (Cudahy, J., concurring in part and dissenting in part).

7. 214 F.3d 888 (7th Cir. 2000).

the United States or Wisconsin possesses certain rights in hydropower derived from the Fox River.⁸

Judge Cudahy's opinions consistently illustrate two principles of great significance for energy law: judicial humility on matters of economic regulation and a deferential brand of federalism that encourages states to act as laboratories for regulatory innovation. In this Essay, we explore the cases that illustrate these two principles in Judge Cudahy's energy jurisprudence. We also discuss the importance and implications of each of these principles in the context of the modern energy industry, which Judge Cudahy has helped to shape. We conclude by recognizing that, in some instances, there will be tension between these two principles. We suggest that Judge Cudahy—or a similarly-minded judge—would be inclined to resolve such discord in a manner that favors innovation over conventional approaches to energy regulation and technology.

I. Judicial Humility in Economic Matters

A. *The Judicial Humility Principle*

Judge Cudahy's opinions reflect a philosophy of judicial humility in economic matters that is rooted in an understanding that judges are not as adept as administrative agencies at addressing complex and technical regulatory problems. This approach is not, of course, rooted in a belief that administrative agencies are invariably correct in their decisions and policy choices,⁹ but simply that they are in a better position than judges to balance policy values and legal obligations and to make the required judgment calls on matters requiring expertise. Such an attitude is certainly not unique to Judge Cudahy, but its frequent recurrence in his opinions illustrates his keen understanding and endorsement of principles that can be traced to the Supreme Court's rejection of substantive due process in *Federal Power Commission v. Hope Natural Gas Co.*¹⁰ and the subsequent post-New Deal trend of judicial deference to economic regulation.

8. Another colorful example is *Stone & Webster Engineering Co. v. Herman*, 115 F.3d 1568 (7th Cir. 1997), in which Judge Cudahy surveys the unfortunate history of a particularly fire-prone nuclear plant. *See id.* at 1569 (“Browns Ferry is no stranger to the danger of fire. In 1975, a fire at the plant failed (narrowly) to cause a meltdown, but did result in the coining of an industry byword for a disastrous conflagration. . . . [I]n 1996, after the events in this case, an unused cooling tower burned up.”).

9. *See* Richard D. Cudahy, *Retail Wheeling: Is This Revolution Necessary?*, 25 ENERGY L.J. 161, 166 (2004) (“Can planners be wrong? Of course. Can regulators be ignorant, timid, political, or even venal? Unfortunately, yes.”).

10. 320 U.S. 591 (1944). *Hope* largely withdrew the courts from the business of utility rate determination by eliminating any inquiry into the appropriateness of the regulator's methodology and by prescribing instead that courts focus only on whether the methodology produced just and reasonable pricing. *Id.* at 602 (“It is not theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry under the [Federal Power] Act is

We believe that Judge Cudahy's years on the Wisconsin Public Service Commission gave rise to his optimism about the efficacy of regulation generally and his respect for the determinations of expert energy regulators in particular. Likewise, Judge Cudahy's skepticism about the economic prowess of judges has led him to defer to the initial decisions of administrative authorities. As a result of these two attitudes, Judge Cudahy has frequently dissented from the views of his colleagues in favor of deferring graciously to regulators.¹¹ Yet this willingness to accord deference has never led to mere rubber-stamping of regulators' decisions. Judge Cudahy has been prepared to part ways with an agency's reasoning, especially where the question is not one peculiarly within the ken of the agency. Thus, in *City of Kaukauna*, Judge Cudahy vacated a decision by FERC, finding its interpretation of an 1872 property deed to be implausible.¹² FERC may be an expert in matters of energy regulation—in this case, the question of whether the 1920 Federal Power Act¹³ granted the federal government the right to be reimbursed by downstream dam owners for improving waterways—but FERC's interpretation of an archaic document, unrelated to energy law and policy, was not especially authoritative.¹⁴

Judge Cudahy's skepticism regarding judicial economic expertise is amplified in energy cases, where his keen understanding of the challenges of energy regulation has increased his willingness to question economic assumptions and rationales that originate from the bench rather than from regulators.¹⁵ Put another way, his positions acknowledge the special problems

at an end." *Hope* put an end to the substantive due process inquiry of *Smyth v. Ames*, 169 U.S. 466, 468 (1898), according to which "the basis of all calculations as to the reasonableness of rates to be charged . . . must be the fair value of the property being used by [the utility] for the convenience of the public," as ascertained in light of a laundry list of financial and economic factors, see *id.* at 546-47.

11. See, e.g., *Ill. Commerce Comm'n*, 576 F.3d at 482 (Cudahy, J., concurring in part and dissenting in part) ("I think FERC may be in a better position to implement a policy leading to prompt improvement in a deficient transmission grid than this court, focused as it is on the inevitable complaints of utilities demanding more for their money."); *New England Power Co. v. FERC*, 533 F.3d 55 (1st Cir. 2008) (Cudahy, J., dissenting) ("The majority has called for another remand in this stale case to give the Commission an additional opportunity to restate the conclusion it has already emphatically declared in its ruling on New England Power's (NEP's) petition for clarification and rehearing. The result reached by the Commission here is entirely fair . . .").

12. 214 F.3d at 900.

13. 16 U.S.C. § 803(f) (2006).

14. *City of Kaukauna*, 214 F.3d at 899; see also *Amoco Prod. Co. v. FERC*, 765 F.2d 686, 690 (7th Cir. 1985) ("We owe some deference to the Commission as an expert body dealing regularly with natural gas supply contracts. Nonetheless, our deference is not nearly so marked as it would be in reviewing a purely regulatory determination of the Commission.") (citation omitted). Judge Cudahy has also been prepared to reject agency conclusions where the agency's figures are tainted by inaccuracy or where its reasoning bears hallmarks of post-hoc rationalization. See, e.g., *Van Abbema v. Illinois*, 807 F.2d 633, 643 (7th Cir. 1986) (vacating in part an environmental impact statement by the Army Corps of Engineers relating to a coal facility because the agency's reasoning was "obscured by a record of miscalculations followed by recalculations apparently intended only to bolster a decision already made").

15. See, e.g., *Ill. Commerce Comm'n v. FERC*, 576 F.3d 470, 479 (7th Cir. 2009) (Cudahy, J., concurring in part and dissenting in part) ("However theoretically attractive may be the principle of

of the energy industry: capital investments are enormous and must be committed years and even decades before the infrastructure enters service; fuel and electricity costs vary wildly based on unpredictable events; and utilities must meet unrelenting demands for energy production.

The influence that Judge Cudahy's firsthand knowledge of energy regulation has had on his judging is especially evident in the recent *Illinois Commerce Commission* case. This seminal decision was one of the first to address FERC's efforts to allocate the costs of building new interstate transmission infrastructure to accommodate new generation capacity, including renewable resources such as wind power. In his dissent from the majority's decision rejecting FERC's cost allocation approach, Judge Cudahy recognized that, in cases affecting the electrical transmission grid, courts chartered to resolve binary disputes have the potential to issue decisions that are vexatious to the broader public interest, which is the power grid's *raison d'être*.¹⁶ Therefore, it seems to follow *a fortiori* that regulators charged with protecting the interests of the system deserve deference from the courts.

Underlying Judge Cudahy's humility in the context of energy policy is a belief that economics, as a discipline, does not always produce the best solutions for heavily-regulated industries providing public services. This belief that economic theory should not be the sole framework for energy regulation does not stem from any particular economic attributes of the energy industry (such as its character as a "natural monopoly" capable of extracting monopolistic rents), but rather from its character as one of a handful of "infrastructure industries" that implicate broader public interests.¹⁷ Decisions affecting such foundational industries are best made with an eye toward the industry's public purpose, rather than toward an economic theory that prioritizes tallying up the precise costs and benefits attributable to each party involved in the system. This conviction is reflected in Judge Cudahy's academic writing¹⁸ as well as his judicial opinions.¹⁹

'beneficiary pays,' an unbending devotion to this rule in every instance can only ignite controversy, sustain arguments and discourage construction while the nation suffers from inadequate and unreliable transmission."); *id.* at 482 ("Pro rata assignment of costs eliminates not only lawsuits but nitpicking controversies of every sort and delays standing in the path of action. From that point of view, I think FERC may be in a better position to implement a policy leading to prompt improvement in a deficient transmission grid than this court, focused as it is on the inevitable complaints of utilities demanding more for their money."); *Illinois ex rel. Hartigan v. Panhandle E. Pipe Line Co.*, 852 F.2d 891, 899 (7th Cir. 1988) (en banc) (Cudahy, J., concurring) (questioning the assumption that a utility's ability to pass along costs to customers would chill its enthusiasm for bringing a lawsuit against an antitrust violator, because "[u]nder the practical facts of regulation [an Illinois utility] would ordinarily have a greater incentive to bring this litigation than economic theory suggests").

16. *Ill. Commerce Comm'n*, 576 F.3d at 482.

17. See Cudahy, *supra* note 9, at 164.

18. See *id.* ("The foundational nature of the electric power industry is important because the more a technology like electricity goes to the roots of the economy, the more it spawns . . . social benefits and social costs which do not figure in conventional economic analyses of the system employing the technology."); see also Richard D. Cudahy, *PURPA: The Intersection of Competition and Regulatory Policy*, 16 ENERGY L.J. 419 (1995) (arguing that the purposes of the Public Utility

B. Implications of the Judicial Humility Principle for the Seventh Circuit's Brand of Economic Theory

As one might expect, Judge Cudahy's skepticism about the judiciary's expertise in economic matters has been a source of conflict with other Seventh Circuit judges, who have been more ambitious in applying economic theory to law. The Judge has not shied away from acknowledging this intellectual friction with his colleagues. In one particularly memorable dissent, he chided his colleagues for assuming that "any efforts to protect the weak against the strong would, through the exhilarating alchemy of economic theory, increase rather than diminish the burden upon the powerless."²⁰

Judge Cudahy's skepticism regarding the judiciary's economic aptitude, however, is rooted in more than a mere distaste for the contemporary Seventh Circuit's particular brand of economic theory. Judge Cudahy has shown similar concern for what he views as unwarranted economic determinism even in cases where the offending certitude was not informed by orthodox liberal economic theory. One good example is found in an antitrust case, *Loeb Industries v. Sumitomo Corp.*, which arose out of Sumitomo's manipulation of the copper market.²¹ By the time the case reached the Seventh Circuit, it was well-established that Sumitomo had engaged in a premeditated scheme to game the copper market by "hoard[ing] vast supplies of physical copper for the purpose of restricting supply," then "call[ing] in shorts to raise copper demand to inflated levels," thereby "forc[ing] traders] to cover their positions by acquiring physical copper at inflated prices."²² Judge Diane Wood, writing for the majority, was willing to accept that certain manufacturers had been injured by the inflated price of copper, despite having no direct dealings with Sumitomo, because "the prices of [copper] and [copper] futures 'tend to move in lockstep.'"²³ Judge Cudahy viewed this concession as overly credulous of the plaintiffs' arguments and wrote separately to "question the appropriateness of finding a 'lockstep' relationship between the copper futures and cash markets

Regulatory Policies Act of 1978 include not only market competition but also conservation and efficiency).

19. See *Ill. Commerce Comm'n.*, 576 F.3d at 482 (noting "the urgency of the need to build transmission and the need for incentives to that end," and arguing that "[p]ro rata assignment of costs eliminates not only lawsuits but nitpicking controversies of every sort and delays standing in the path of action").

20. See *Original Great Am. Chocolate Chip Cookie Co. v. River Valley Cookies, Ltd.*, 970 F.2d 273, 283 (7th Cir. 1992) (Cudahy, J., dissenting); see also *Flamm v. Eberstadt*, 814 F.2d 1169, 1182 (7th Cir. 1987) (Cudahy, J., concurring in the judgment and concurring in part) ("I believe at several points in the majority opinion the moral underpinnings of the law are at risk in the sweep of the economic analysis.").

21. 306 F.3d 469, 477 (7th Cir. 2002).

22. *Id.*

23. *Id.* at 488.

. . . .”²⁴ In contrast to the majority, Judge Cudahy would have been more cautious about departing from the general rule that the only party legally injured by an antitrust violator is the direct purchaser.²⁵ Thus, even in cases that are difficult to classify along traditional ideological lines, Judge Cudahy has served to remind his colleagues on the Seventh Circuit of the dangers of attributing certainty to economic theories and of the limited economic aptitude of the judiciary.

C. *Future Implications for Energy Law*

The idea of judicial humility regarding economic questions will take on particular importance in the field of energy regulation in the coming years, as the country contemplates a systemic modernization of the electrical grid and a major transformation of the sources supplying its electricity. Of course, it remains to be seen whether such initiatives will be undertaken vigorously at a national level. Federal legislation is not a *sine qua non* of upgrading the electrical grid, however, and significant and costly electrical grid projects are already underway. For instance, any significant wind or solar generation project built in response to a state renewable portfolio standard will affect the operation of the electrical system due to the variable nature of wind and solar power, as will any high-voltage transmission line intended to access power from far-flung renewable sources or to reduce transmission constraints around urban areas. As the high-voltage transmission project at issue in *Illinois Commerce Commission v. FERC* exemplifies, each grid-modernization project imposes costs, and therefore presents for regulators the touchy question of how to allocate those costs among the numerous parties affected.

Judge Cudahy’s characteristic solicitude toward energy regulators takes on particular importance in view of its divergence from circuit court attitudes in recent grid-modernization cases. In three recent decisions related to the siting of transmission lines, appellate courts have not shown deference towards regulators in any sense of the word. In one of these cases, *Illinois Commerce Commission*, Judge Cudahy is on record dissenting from the majority opinion as insufficiently deferential to FERC and as unduly preoccupied with precise cost allocation.²⁶ In the other two cases, the Fourth and Ninth Circuits effectively gutted an important new power conferred on the Commission by the Energy Policy Act of 2005 to issue federal permits for transmission projects (the so-called backstop siting authority). The Fourth Circuit rejected FERC’s

24. *Id.* at 498 (Cudahy, J., concurring in part and concurring in the judgment in part); *see also id.* at 499 (describing the “lockstep” idea as “more a slogan than a fact” under certain circumstances).

25. *See id.* at 499 (citing *Ill. Brick Co. v. Illinois*, 431 U.S. 720 (1977)).

26. *See supra* notes 11 & 15-16 and accompanying text.

broad interpretation of its backstop powers,²⁷ while the Ninth Circuit undermined the very foundation of the FERC's authority by vacating the U.S. Department of Energy's prerequisite national study of areas of transmission congestion.²⁸ In combination, the two cases have sent the Commission back to the drawing board. Each case produced a dissent from a circuit judge who contended that the agency's interpretation of its statutory mandate should be accorded greater deference.²⁹ Thus, the question of the appropriate degree of deference is an increasingly important one in energy regulation, and Judge Cudahy has staked out a prominent position among the judges favoring deference to expert regulators.

The challenge of finding the appropriate degree of deference to regulators will be further complicated in the coming years by the growing role played by non-governmental regulators with authority over multistate territories. These industry bodies, known as regional transmission organizations (RTOs), have emerged with FERC's encouragement³⁰ and are now taking a lead role in initial cost-allocation decisions for projects with systemic benefits. Despite their non-governmental status, they are undeniably expert and are charged with seeing to the public interest.³¹ Thus, the key question for future cases involving RTOs will be: What is it about *traditional* energy regulators that earns them deference before the courts? This question will need to be answered, implicitly or explicitly, in order to decide whether the new supra-state regulators are equally deserving of deference despite their non-governmental nature.

In sum, the question of the degree of judicial deference owed to energy regulators in economic matters is an unsettled question with major implications for the direction of the industry. Federal courts have a long tradition of deferring to agencies in matters of economic regulation, but as the three transmission-related cases discussed above highlight, such deference is hardly guaranteed by reviewing courts. Judge Cudahy's opinions should serve as a

27. See *Piedmont Envtl. Council v. FERC*, 558 F.3d 304, 309-10 (4th Cir. 2009) (clarifying that FERC can only intervene where state authorities have taken no action on a proposed project for a year, and that it has no authority where state authorities simply reject the proposal).

28. See *Cal. Wilderness Coal. v. U.S. Dep't of Energy*, 631 F.3d 1072, 1079 (9th Cir. 2011).

29. See *id.* at 1107 (Ikuta, J., dissenting) ("[T]he DOE erred by not consulting with affected states at the threshold of a massive, yearlong, nationwide study of electric transmission congestion. But this error was harmless. Petitioners have not shown that DOE's error prevented them from . . . making arguments to DOE, nor have they shown that DOE would have made a different decision absent the error. In short, they have failed to offer even a scintilla of evidence to establish prejudice."); *Piedmont*, 558 F.3d at 320 (Traxler, J., concurring in part and dissenting in part) ("I believe that FERC correctly interpreted [the backstop siting provision] . . . to include the failure or refusal to grant a permit application for more than one year in cases in which the permit application was denied . . .") (internal citation omitted).

30. See Stephen Ferrey, *Goblets of Fire: Potential Constitutional Impediments to the Regulation of Global Warming*, 35 *ECOLOGY L.Q.* 835, 878 (2008).

31. See generally Michael H. Dworkin & Rachel Aslin Goldwasser, *Ensuring Consideration of the Public Interest in the Governance and Accountability of Regional Transmission Organizations*, 28 *ENERGY L.J.* 543, 544-49 (2007) (examining the history of FERC's mandate to advance the "public interest" and the ways in which FERC has sought to regulate RTOs with this goal in mind).

reminder to courts that a few important decisions hewing to economic humility and deference could go a long way in securing the success of the national effort to upgrade our energy grid, along with other important energy infrastructure priorities.

II. Subnational Policy Innovation

A. *The Subnational Policy Innovation Principle*

Many of Judge Cudahy's opinions reflect an optimism about innovation by subnational governmental bodies—especially states. Justice Brandeis famously celebrated in his dissent in *New State Ice Co. v. Liebmann* the fact that “a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country”³² *New State Ice* involved a classic question of economic regulation—state licensure of businesses affected with the public interest—so it is not surprising that Judge Cudahy, a former state regulator who himself oversaw some important innovations in regulatory policy, has taken inspiration from Justice Brandeis's account of states as laboratories.³³ Thus, when a Seventh Circuit majority headed by Judge Richard Posner declared the Telecommunications Act of 1996 to be the exclusive method for telephone network interconnection, Judge Cudahy dissented, noting “the strong presumption against preemption of state law.”³⁴ The majority held that federal law requiring states to arbitrate price disputes preempted state efforts to avert such disputes by requiring utilities to file an *ex ante* tariff.³⁵ By contrast, Judge Cudahy advocated a more nuanced approach that would allow state commissions to regulate prospectively.³⁶

Judge Cudahy's energy law opinions have similarly expressed his enthusiasm for allowing state regulators to innovate against the backdrop of federal law. When the Seventh Circuit struck down Illinois's favorable regulatory treatment of environmental controls that enabled generators to use sulfur-intensive Illinois coal without offending the Clean Air Act, Judge Cudahy concurred, but “with significant reservations”;³⁷ in particular, the Judge observed that “the assurance of rate base treatment for [technology that] provide[s] a *capability* for using Illinois coal[] seems a tenuous basis for

32. 285 U.S. 262, 386-87 (1932) (Brandeis, J., dissenting).

33. Judge Cudahy quotes *New State Ice* directly, albeit outside the context of economic regulation, in *McMorris v. Israel*, 643 F.2d 458, 463 (7th Cir. 1981), in which the court approved of a Wisconsin requirement that a district attorney sign a written stipulation to the admission of the results of a polygraph test.

34. *Wis. Bell, Inc. v. Bie*, 340 F.3d 441, 445 (7th Cir. 2003) (Cudahy, J., dissenting).

35. *Id.* at 444 (Posner, J.).

36. *Id.* at 449 (Cudahy, J., dissenting).

37. *Alliance for Clean Coal v. Miller*, 44 F.3d 591, 599 (7th Cir. 1995) (Cudahy, J. concurring).

finding a violation of the [dormant] Commerce Clause.”³⁸ In another case, involving the interaction between state environmental regulation and federal nuclear waste regulation, Judge Cudahy complained that the majority “finds preemption much too easily,” and accused the majority of “seeking out a conflict where one does not necessarily exist in order to bolster its shaky argument for preemption.”³⁹

In his scholarly writings, Judge Cudahy has also focused on the importance of state autonomy in connection with energy diversification.⁴⁰ The Public Utility Regulatory Policies Act of 1978⁴¹ (PURPA) requires utilities to purchase electricity from certain qualifying non-utility generation projects, at a price equal to the purchasing utility’s “avoided cost.” In the 1990s, FERC decided that PURPA effectively preempts California’s regulatory scheme allocating wholesale contracts based on “benchmark prices,” which included a requirement that approximately half the capacity be set aside for renewable bidders.⁴² Judge Cudahy expressed skepticism about FERC’s conclusion that PURPA preempts California’s approach to calculating avoided cost rates, noting the decision’s implications for conservation and diversification of energy resources across the country. His analysis reminds us that, while PURPA did embrace competition as *one* of its goals, “both fuel diversity and energy conservation might be completely ignored if the only emphasis in evaluating generation is on current market price.”⁴³ In fact, as Judge Cudahy correctly observed, PURPA did not embrace a one-size-fits-all nationalistic approach to encouraging innovation, but instead embraced a more nuanced cooperative-federalism scheme in which states played a crucial role in advancing the basic values of the statute.⁴⁴ While the Energy Policy Act of 2005⁴⁵ reformed PURPA to address some of the problems Judge Cudahy highlighted, his analysis of the tension between state regulators in advancing conservation and innovation values under PURPA remains relevant today.

B. Future Implications for the “Smart Grid” and Renewables

While Judge Cudahy’s federalism opinions in the energy context have rarely garnered a majority on his court, they nonetheless lay out important

38. *Id.* at 598.

39. *Brown v. Kerr-McGee*, 767 F.2d 1234, 1246 (7th Cir. 1985) (Cudahy, J., concurring in part and dissenting in part).

40. *See* Cudahy, *supra* note 18.

41. Pub. L. No. 95-617, 92 Stat. 3117 (codified as amended at 16 U.S.C. §§ 2601-2645 (2006)).

42. *See* *So. Cal. Edison Co.*, 71 F.E.R.C. ¶ 61,269 (1995); 70 F.E.R.C. ¶ 61,215 (1995).

43. Cudahy, *supra* note 18, at 421.

44. *Id.* at 436 (“When PURPA was adopted, Congress tended to defer to state authority, the traditional vesting place for regulatory authority over electric utilities.”).

45. Pub. L. No. 109-58, 119 Stat. 594 (codified as amended in scattered sections of U.S.C. (2006)).

principles for modern energy regulation. Much discussion of energy markets and climate change focuses on federal regulation as a solution. Judge Cudahy, however, seems keenly aware of the traditional role played by state regulators and of the incompleteness of federal jurisdiction related to energy resources. His approach would leave states considerable leeway to address both economic and environmental regulation of energy resources, resulting in deference to state solutions that are challenged on preemption grounds. This approach has important implications for the future of energy regulation in the United States and for the role of subnational institutions in the values of energy law.

To begin, allowing states considerable leeway to experiment encourages innovative approaches to conservation and environmental regulation. It is well-chronicled that states have taken the lead in climate change policy innovation, while the federal government has lagged in both legal solutions and policy approaches.⁴⁶ In the case of electric power, since states retain jurisdiction over retail rates, state regulatory innovations are essential to encouraging conservation. Such innovations are hardly a new development: Judge Cudahy's chairmanship of the Wisconsin Public Service Commission in the 1970s saw the adoption of innovative regulatory approaches, including a rate structure that moved away from fixed rates based on cost-of-service and toward more active metering of energy prices based on use.⁴⁷ While the former system incentivized consumption, often featuring a price that *declined* as consumption increased, the latter system is designed to send appropriate price signals to discourage unneeded consumption. In what has become a classic article on the development of dynamic pricing, Judge Cudahy and the economist Robert Malko described the "flattening" of the prior "declining block" pricing structure in the *Madison Gas* decision, as a "way station on the . . . road to time-of-day pricing."⁴⁸

Judges must be aware of the critical role state regulators play in effectuating conservation policy. For example, as a part of a broad energy and climate change policy, the Obama Administration has embraced "smart grids"—power distribution and metering systems that will improve the sharing of information to realize system efficiencies. But federal regulators lack authority to require utilities to adopt smart grids on their own, as retail pricing and metering by utilities remain firmly within the jurisdiction of state regulators. Policies such as those Judge Cudahy helped to design in the 1970s continue to be of great importance as states experiment with smart grid policies

46. See David Adelman & Kirsten Engel, *Adaptive Federalism: The Case Against Reallocating Environmental Regulatory Authority*, 92 MINN. L. REV. 1796, 1894 (2008); Anne E. Carlson, *Energy Efficiency and Federalism*, 107 MICH. L. REV. FIRST IMPRESSIONS 63 (2008), <http://www.michiganlawreview.org/assets/fi/107/carlson.pdf>.

47. See *Madison Gas & Elec. Co.*, Docket No. 2-U-7423, 5 P.U.R. 4th 28 (Wisc. Pub. Serv. Comm'n Aug. 8, 1974).

48. Richard D. Cudahy & J. Robert Malko, *Electric Peak-Load Pricing: Madison Gas and Beyond*, 1976 WISC. L. REV. 47, 74-75.

that will make time-of-day and real-time pricing a reality. A preemption jurisprudence that is too quick to preclude states from investing in new metering technologies or adopting innovative pricing policies to encourage conservation could forestall such developments altogether.

Judicial attitudes towards state innovation will also impact the ability of states to encourage investment in renewable energy. In the past decade, many states have experimented with feed-in tariffs that require utilities to purchase power from renewable projects in order to encourage the development of such projects. As in the 1990s, FERC has weighed in with a decision that PURPA limits state rate-setting powers in this arena.⁴⁹ Judge Cudahy's judicial and scholarly writings serve as reminders that excessive preemption may undermine states' efforts to manage fuel diversification and energy conservation, and it may ultimately impair the development of renewable energy resources.

C. *Future Implications for Transmission Cost Allocation*

Although Judge Cudahy has been somewhat skeptical of procompetitive deregulation, his scholarly work and opinions have predicted the rise—as a consequence of deregulation—of national markets and regional approaches to energy governance. His opinions recognize some practical limitations to regulation at the state and national levels in the context of regional markets and highlight the resulting significance of regional governance approaches—especially where both state and federal regulators have limited jurisdiction.

For example, federal regulators have limited jurisdiction to require local utilities to pay for upgrades to interstate transmission infrastructure with regional benefits,⁵⁰ while state regulators lack the ability to require customers outside their jurisdiction to share in the costs of transmission upgrades. The emergence of mid-level regulatory bodies such as RTOs thus permits Judge Cudahy to reject a one-size-fits-all national approach to transmission cost allocation, while recognizing that regional challenges such as the planning, siting, and pricing of transmission cannot depend solely on the decisions of state regulators. Such solutions might depend on the approval of federal

49. See Cal. Pub. Utils. Comm'n, 132 F.E.R.C. ¶ 61,047, at ¶ 67 (holding that California's feed-in tariff program is not preempted by the Federal Power Act or PURPA as long as the generating facilities in question are "Qualifying Facilities" under PURPA, and the tariff rates "do[] not exceed the avoided cost of the purchasing utility"), *clarified and reh'g dismissed*, 133 F.E.R.C. ¶ 61,059 (2010). Although the Commission framed its decision as creating space for California to implement its tariff system without preemption, *see id.*, 133 F.E.R.C. ¶ 61,059, at ¶ 5, its consequence is that a state feed-in tariff must operate within the strictures of the federal PURPA regime. See generally Jim Rossi, *Clean Energy and the Price Preemption Ceiling*, 3 SAN DIEGO J. CLIMATE & ENERGY L. 247 (2012) (arguing that interpretations of PURPA as a price preemption ceiling thwart subnational efforts toward energy conservation and adoption of cleaner energy sources).

50. See Jim Rossi, *The Trojan Horse of Electric Power Transmission Line Siting Authority*, 39 ENVTL. L. REV. 1015, 1033-35 (2009) (describing existing federal law governing transmission-line siting).

regulators, as occurred when FERC approved the cost allocation method of the Pennsylvania-New Jersey-Maryland (PJM) RTO that was rejected in *Illinois Commerce Commission*,⁵¹ but it also depends on states' willingness to authorize participation in regional solutions as a way of experimenting in the multistate context.

We view Judge Cudahy's partial dissent in *Illinois Commerce Commission* as an application of Justice Brandeis's idea of states as laboratories to a regional, supra-state context, insofar as it would have allowed an RTO comprised of utilities from multiple states to experiment with new ways of allocating transmission upgrade costs incurred in pursuit of grid-wide reliability.⁵² By advocating the extension of the state policy experimentation prerogatives described in *New State Ice* to RTOs, Judge Cudahy recognized that these multijurisdictional organizations will be increasingly responsible for important energy policy decisions—and that with respect to certain issues, the states will have a correspondingly smaller role.⁵³

III. Resolving the Deference Tension in U.S. Energy Law

As a parting thought, we consider and attempt to resolve an apparent tension between the dual principles we have identified in Judge Cudahy's jurisprudence: deference to the economic expertise of energy regulators and deference to states acting as laboratories for energy policy innovations. When a court is asked to review the decisions of state regulators, there is no tension between the two principles—in fact, the decision under review would be entitled to a sort of dual deference. But in the typical case, federal courts are asked to review the decisions of *federal* regulators. In such a case, deference to regulators will not always encourage subnational innovation—and may even undermine it. How should a state regulatory policy disapproved by federal regulators fare in court under these two principles? While this question cannot be answered definitively in the abstract, we think that a few generalizations are possible in light of Judge Cudahy's energy jurisprudence. We think that Judge Cudahy and any like-minded judge would resolve this tension pragmatically by recognizing that federal energy statutes are enacted to serve multiple values,

51. PJM Interconnection, L.L.C., 119 F.E.R.C. ¶ 61,063 (2007), *reh'g denied*, 122 F.E.R.C. ¶ 61,082 (2008).

52. See *Ill. Commerce Comm'n v. FERC*, 576 F.3d 470, 479 (7th Cir. 2009) (Cudahy, J., concurring in part and dissenting in part).

53. Judge Cudahy's dissent also emphasized the voluntary nature of RTO membership. See *id.* ("Concerns about the real value to individual utilities of the stability and efficiency provided by improvements to the backbone grid are answered by their voluntary participation in the power pool and its collaborative . . . planning[] process."). In other words, whereas the strongly preemptive majority opinion views all subnational regulation monolithically, Judge Cudahy would consider aspects—like voluntariness, consensus, and the ability to participate in RTO governance—that heighten the legitimacy of non-federal decision-makers.

favoring flexibility in institutional approaches, and seeking to promote the ability of subnational institutions to innovate.

In these situations, a subnational regulator's purpose in enacting a particular policy will likely be important to its treatment by a reviewing court. Subnational policies can diverge from federal policies, or meet with the disapproval of federal regulators, for several reasons. Sometimes jurisdictions champion local interests, assigning lower priority to costs and benefits outside their jurisdiction.⁵⁴ In other cases, states or RTOs accept greater local costs when attempting to set a model for other states or the federal government, or with the intention of being as prepared as possible for future contingencies.⁵⁵ We think that, all other things being equal, regulation in the latter vein—which views federal regulation as a minimum to be improved upon—would fare better in the eyes of Judge Cudahy.

In other words, it seems that Judge Cudahy sees the system-wide welfare of the electrical grid as a value served by federal law, and he furthermore believes that federal law ordinarily establishes a floor—not a ceiling—for this value. This federal-floor approach encourages policy innovation by authorizing subnational regulators to accept heightened costs in the interest of regional benefits. In contrast, efforts to avoid the local costs of projects endorsed by federal regulators and featuring system-wide benefits are viewed with a jaundiced eye, as potential affronts to the federal floor. While nothing in federal law requires such a specific allocation of responsibility between the federal government and the states in setting transmission prices, we are unaware of any

54. For instance, in 2003-05, Kentucky and Virginia policymakers sought to prohibit or delay, respectively, utility AEP's efforts to transfer control of its transmission lines to the PJM RTO. See Energy Bar Ass'n, *Report of the Electric Utility Regulation Committee*, 26 ENERGY L.J. 217, 220-21 (2005). The Virginia legislature passed a law temporarily forbidding the transfer, and then FERC issued an order purporting to invalidate Virginia's statute under PURPA, concluding that it was impermissibly motivated by economic protectionism. New PJM Cos., 107 F.E.R.C. ¶ 61,271, ¶¶ 62,216-28 (2004). The matter was ultimately settled after both Virginia and Kentucky agreed to the transfer, while extracting additional conditions. See Press Release, Am. Electric Power Co., Virginia SCC Action Paves Way for AEP To Join PJM Interconnection Oct. 1 (Aug. 30, 2004), <http://www.aep.com/newsroom/newsreleases/?id=1145>; Press Release, Electric Power Supply Ass'n, Kentucky PSC Gives Kentucky Power the Go-Ahead To Join PJM; Estimated Net Benefits of \$13.4 Million Anticipated (May 27, 2004), <http://www.epsa.org/forms/documents/DocumentFormPublic/view?id=378B00000000>. For a discussion of another instance of localism in transmission line siting, see Jim Rossi, *Transmission Siting in Deregulated Wholesale Power Markets: Re-Imagining the Role of Courts in Resolving Federal-State Siting Impasses*, 15 DUKE ENVTL. L. & POL'Y F. 315, 316-19 (2005).

55. In *Illinois Commerce Commission*, for instance, the PJM RTO determined to spread the cost of a certain "backbone" transmission project, and the majority of the RTO's constituent utilities apparently agreed that this cost allocation was appropriate. See *Ill. Commerce Comm'n*, 576 F.3d at 479 (Cudahy, J., concurring in part and dissenting in part). Judge Cudahy would have allowed the RTO and its constituents to undertake the shared cost. *Id.* Another example is California's policy of setting aside for renewable projects one-half of the opportunities under PURPA to participate in the grid as a "qualified facility." See Cudahy, *supra* note 18, at 430; *supra* note 49 and accompanying text. California's policy amounted to a voluntary undertaking of heightened rates in exchange for increased development of renewable energy sources, which is consistent with PURPA's goal of improving fuel diversity. See Cudahy, *supra* note 18, at 421-22 (discussing PURPA's goal of stimulating energy diversity, including from renewable sources); *id.* at 430 (noting FERC's disapproval of California's regulatory approach).

reason why a federal appellate judge should not view electricity-related cases through this lens. The “federal floor” is a familiar idea in energy regulation⁵⁶ and is particularly common in environmental regulation—another area where local authorities may undervalue regional benefits and thereby produce results that are inefficient in a system-wide context. And although sometimes this federal-state relationship is clearly envisioned in a statute, it is usually best articulated in judicial precedent.⁵⁷ Thus, it is not uncommon for the task of expressly identifying a federal floor to fall to the courts. Whether or not Judge Cudahy would explicitly embrace this federal-floor approach to interpreting energy statutes, it certainly seems to reconcile the apparent tension described above, and provides guidance to future judges impressed by the dual principles of economic humility and subnational innovation that Judge Cudahy has embraced and refined in his years on the bench.

56. For instance, the North American Electric Reliability Corporation is empowered by the Energy Policy Act of 2005 to set reliability standards for the electrical grid, subject to domestic oversight by FERC, *see* Energy Policy Act of 2005 § 1211(a), 16 U.S.C. § 824o (2006), but regional electric reliability councils are empowered to set more detailed or stringent regional standards. *See, e.g., Rule 312—Regional Reliability Standards*, in N. AM. ELECTRIC RELIABILITY CORP., RULES OF PROCEDURE OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION 15 (2011), *available at* http://www.nerc.com/files/NERC_Rules_of_Procedure_EFFECTIVE_20110412.pdf (“Regional entities may propose regional reliability standards that set more stringent reliability requirements than the NERC reliability standard or cover matters not covered by an existing NERC reliability standard.”). For another example, federal renewable portfolio standard proposals have envisioned a “federal floor” scheme, whereby more rigorous state renewable portfolio standards would not be preempted by the federal legislation. *See* American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. § 101(a) (as passed by House, June 26, 2009), *available at* <http://www.gpo.gov/fdsys/pkg/BILLS-111hr2454eh/pdf/BILLS-111hr2454eh.pdf> (amending PURPA to require FERC to implement a renewable portfolio standard while “preserv[ing] the integrity, and incorporat[ing] best practices, of existing State and tribal renewable electricity and energy efficiency programs . . .”); *see also* NAT’L RENEWABLE ENERGY LAB., COMPARATIVE ANALYSIS OF THREE PROPOSED FEDERAL RENEWABLE ELECTRICITY STANDARDS, at v (2009), *available at* <http://www.nrel.gov/docs/fy09osti/45877.pdf> (stating that each of three federal renewable electricity standard proposals “aims to prevent preemption of, or interference with, existing state [renewable energy standard] mandates that meet or exceed the federal requirement”).

57. Under both the Clean Air Act and the Clean Water Act, states may enact stricter standards than those imposed by the EPA. *See* William W. Buzbee, *Asymmetrical Regulation: Risk, Preemption, and the Floor/Ceiling Distinction*, 82 N.Y.U. L. REV. 1547, 1565-66 (2007). Neither statute, however, mentions a federal “floor” or expressly describes that allocation of power between the federal and state governments. *See* 33 U.S.C. § 1370 (2006) (describing “State authority” under the Clean Water Act); 42 U.S.C. § 7416 (2006) (describing the “Retention of State authority” under the Clean Air Act).

